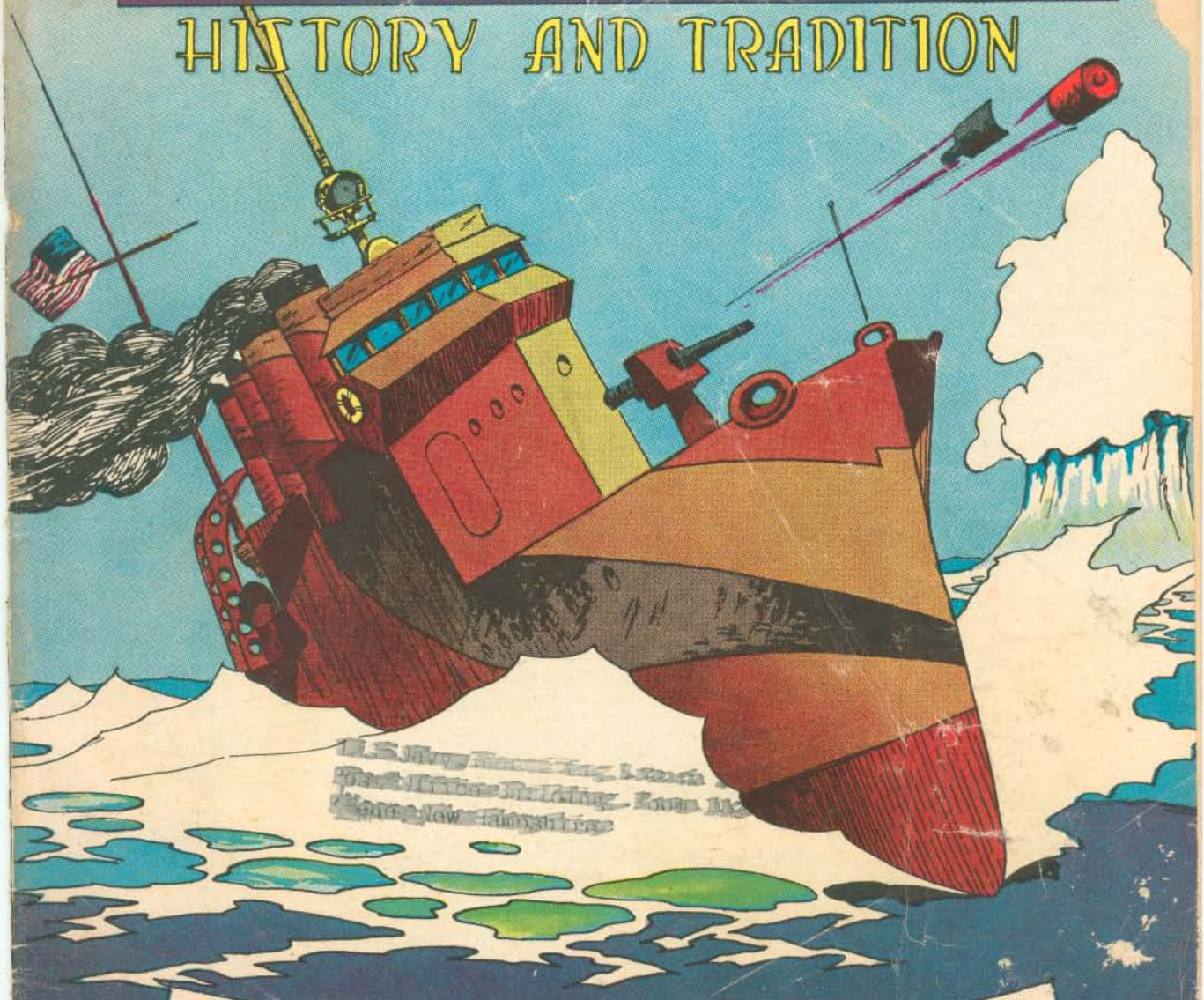
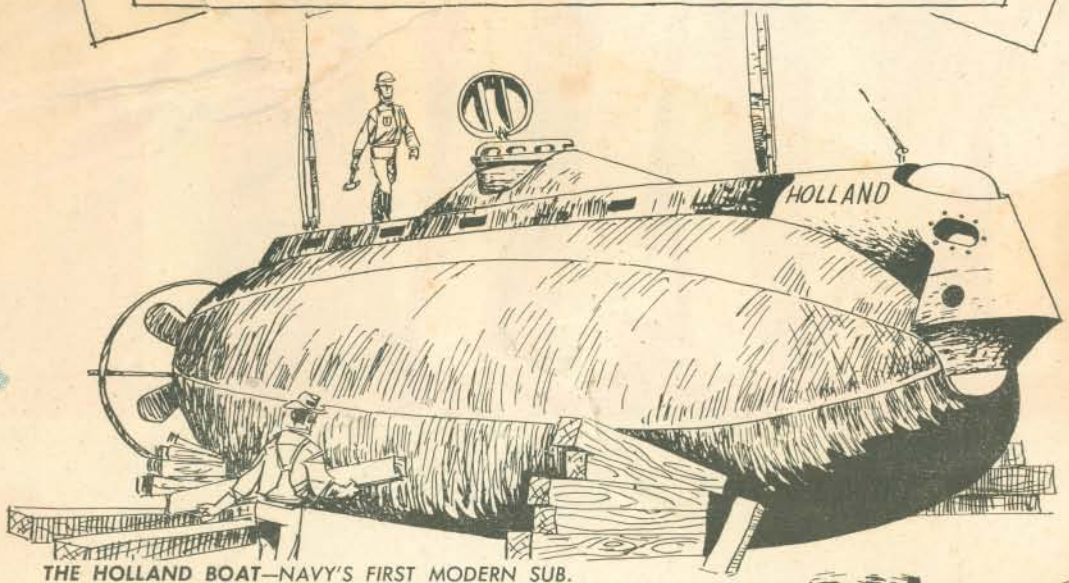
NAVY

HISTORY AND TRADITION



1865 THE DARING AND DIPLOMACY THAT BUILT A GREAT NATION AND NAVY 1936

NAVAL WEAPONS



THE HOLLAND BOAT—NAVY'S FIRST MODERN SUB. CARRYING ON ALONG THE PATH BLAZED BY BUSHNELL, FULTON AND HUNLEY, JOHN P. HOLLAND BUILT A SUB BOAT IN 1875. IN 1895 HE BUILT A BOAT NAMED **PLUNGER** FOR THE U.S. NAVY. SHE FAILED, BUT HOLLAND DIDN'T GIVE UP. FIVE YEARS LATER THERE HE WAS WITH HOLLAND, A DIVING BOAT THAT DID THE JOB. EGG THAT HATCHED A SUBMARINE FORCE.

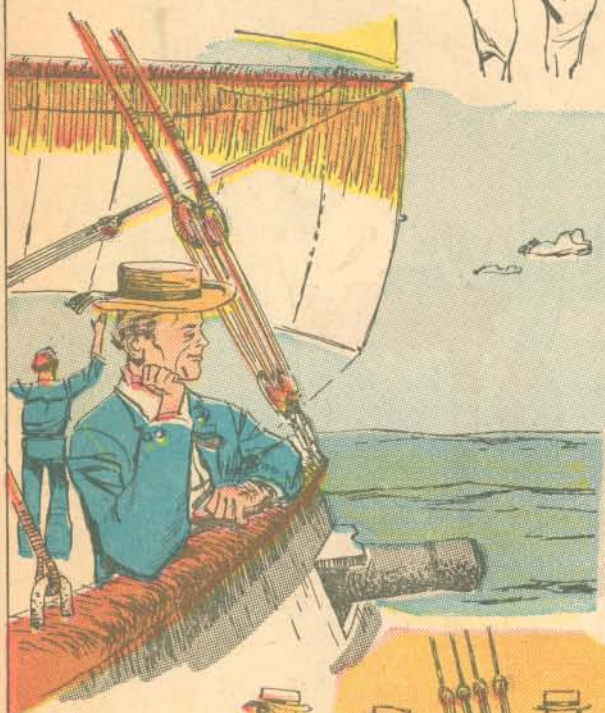
THE **STEAM TORPEDO**. INVENTED BY ENGLISH ENGINEER WHITEHEAD IN 1860. BUT ITS DEPTH AND STEERING CONTROL WAS HIT OR MISS UNTIL LT. HOWELL OF THE U.S.N. INTRODUCED A GYROSCOPE TO CONTROL THE RUDDER IN 1885.

PERISCOPE—THE SUBMARINE'S EYE. A BIG UNDERSEA PROBLEM WAS SOLVED IN 1854 WHEN FRENCH INVENTOR, MARIE DAVY, DESIGNED THE PERISCOPE TUBE. A FRENCH NAVY SUB CARRIED THE FIRST MILITARY PERISCOPE. HOLLAND BORROWED THE IDEA. NEXT PROBLEM: A TORPEDO.

BY 1916 THE LITTLE A-BOATS HAD GROWN INTO K-BOATS—338-FOOTERS, DISPLACING 1,880 TONS. ON THE SURFACE THEY WERE DRIVEN BY DIESEL ENGINES GOOD FOR 10,000 HORSEPOWER. UNDER THE SEA THEY WERE DRIVEN BY POWERFUL ELECTRIC MOTORS. ONLY THE GERMANS HAD A BETTER COMBAT SUB—THE DEADLY U-BOAT. BUT THERE WERE NO BETTER SUBMARINERS THAN SUCH 20TH CENTURY PIONEERS AS NIMITZ AND LOCKWOOD. IN SPUNK AND STAMINA THE AMERICANS WERE WAY UP THERE, HOLDING THE NATION'S UNDERSEA LINE.

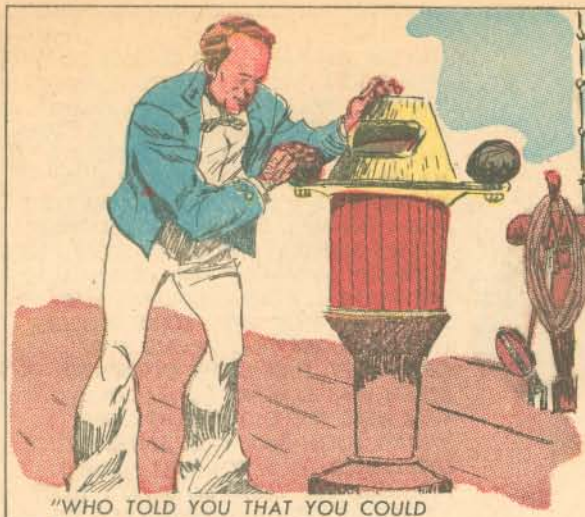
By STOKES WALESBY and THEODORE ROSCOE. © 1959 Copyright by Stokes Walesby, Wash., D. C.

ONE OF THE LADS WHO CLIMBED TO PROMOTION AND PAY IN THE OLD SAILING DAYS WAS STEPHEN B. LUCE. AN AMBITIOUS YOUNGSTER, EAGER TO GAIN AN EDUCATION, HE JOINED THE NAVY TO SEE THE WORLD. THAT WAS BACK IN 1842 IN THE DAY OF WOODEN SHIPS AND IRON MEN. BUT LIFE AT SEA WAS DOUBLE RUGGED, AND CREWS COULD BE A TOUGH AND TARRY LOT. BRAWN WAS THE THING ON THE BOUNDING MAIN, AND THERE WERE EVEN SOME OFFICERS WHO THOUGHT THAT BRAINS WERE SECONDARY. LUCE KNEW OTHERWISE. STEAM WAS COMING IN. MACHINERY WAS HERE. THE OLD SAILING SHIPS WOULD SOON FADE OUT. STEPHEN LUCE DETERMINED TO STAY IN. HE FIGURED HIS HEAD WAS MORE IMPORTANT THAN HIS HANDS. SO HE PACKED A LOT OF BOOKS IN HIS DUFFLE BAG. AS A MID HE WASN'T GIVEN MUCH TIME TO READ. BUT HE FOUND THE TIME. STEPHEN B. LUCE—A LAD WHO USED HIS HEAD.



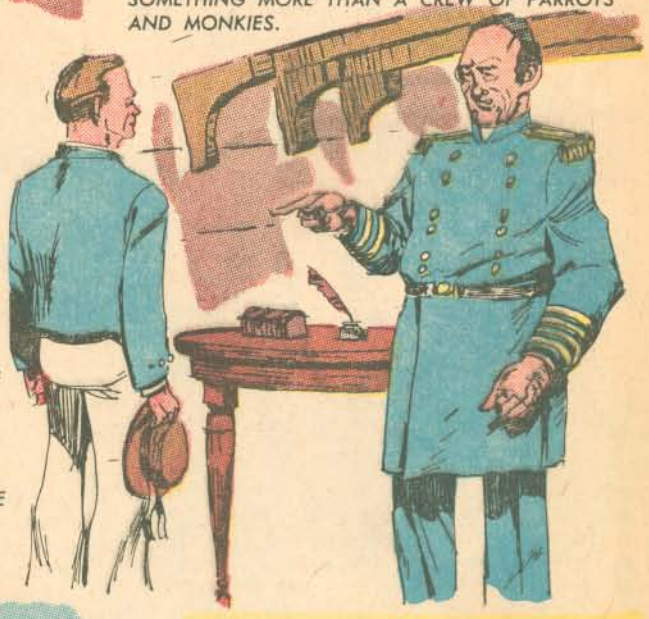
JOIN THE NAVY AND SEE THE WORLD? WELL, HE SAW A LOT OF SKY AND SALT WATER BACK IN THOSE OLD DAYS. AND SOME OF HIS FELLOW MIDS DIDN'T SEE MUCH ELSE. BUT STEVE LUCE KEPT HIS EYE ON THE HORIZON. HE SAW A FUTURE FOR HIMSELF IN THE NAVY. HE SAW A LOT OF GOOD THINGS IN THE OLD NAVY. SOME BAD ONES TOO. LIKE THE TRAINING SYSTEM.

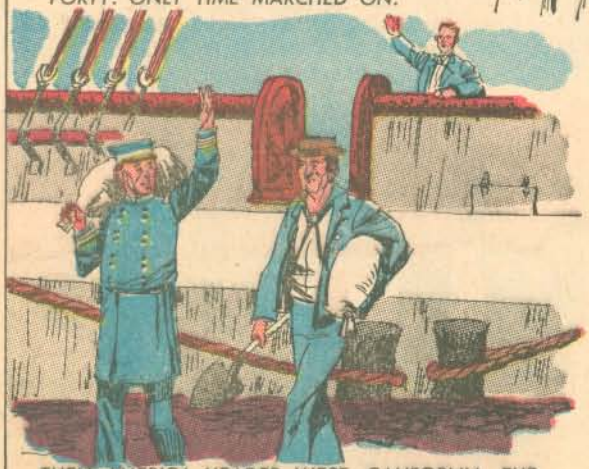
BACK IN THE OLD DAYS NAVAL CADETS HAD TO LEARN THE HARD WAY. THE HARDEST! THAT IS, THEY GOT THEIR EDUCATION FROM SEA-GOING PROFESSORS WHO WERN'T MUCH INTERESTED. SOME HAD FLUNKED AS TEACHERS ASHORE. OTHERS WERE RUM-POTS. INSTRUCTION WAS LACKADAISICAL. BUT THE NAVY NEEDED THE BEST. IGNORANCE COULD BE FATAL WHEN THE TEST WAS A SEA BATTLE.



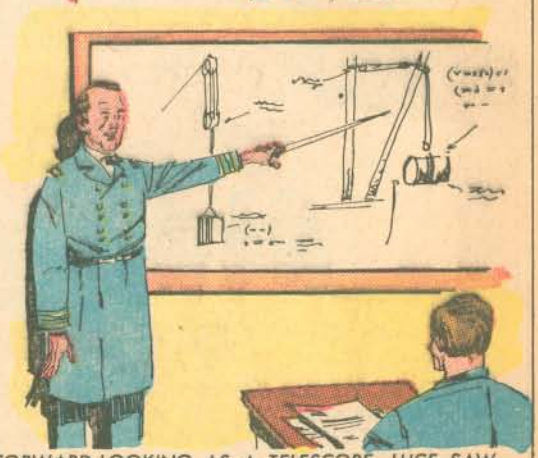
"WHO TOLD YOU THAT YOU COULD THINK ABOARD MY SHIP!" ROARED THOMAS WYMAN, CAPTAIN OF THE OLD **COLUMBUS.** WYMAN WAS WHAT THEY CALLED A SUN-DOWNER. HE RULED THE SHIP LIKE A MONARCH. WANTED NO ADVICE FROM OFFICER OR MAN. SO LUCE WAS CALLED TO THE MAST FOR ACTING ON HIS OWN INITIATIVE. THERE'D BEEN TROUBLE AFT, AND HE'D SETTLED IT SMARTLY, NOT WANTING TO BOTHER THE BUSY CAPTAIN WITH PETTY DETAIL. HE NEVER FORGOT THE DRESSING DOWN FROM WYMAN. BUT HE COULDN'T HELP THINKING ANY MORE THAN HE COULD STOP BREATHING. ONE OF THE TROUBLES WITH NAVAL SERVICE IN THOSE EARLY AMERICAN DAYS WAS THE PROMOTION SYSTEM. OLD-TIMERS LIKE WYMAN REFUSED TO RETIRE. LIEUTENANTS WAITED YEARS FOR A CHANCE TO ADVANCE. A YOUNGSTER LIKE LUCE MIGHT STILL BE A MID WHEN HE WAS FORTY. ONLY TIME MARCHED ON.

TRAINING IN THE 1840'S WAS MONKEY-SEE, MONKEY-DO. YOU WATCHED THE OLD TIMER, AND YOU TRIED TO COPY THE MOTIONS. RULES YOU LEARNED BY THE PARROT METHOD, RATTLING THEM OFF WITHOUT THINKING. TROUBLE WAS, EVERYBODY SEES A DIFFERENT WAY, AND THE OLD-TIMER MIGHT BE WRONG. RULES SHOULD BE UNDERSTOOD. LUCE WANTED TO KNOW THE WHYS AND WHEREFORES. HE THOUGHT A GOOD SHIP NEEDED SOMETHING MORE THAN A CREW OF PARROTS AND MONKIES.



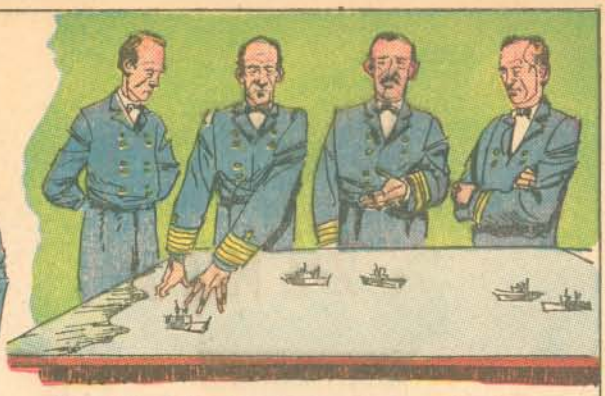


THEN AMERICA HEADED WEST. CALIFORNIA. THE GOLD RUSH! MANY OFFICERS AND MEN QUIT THE NAVY TO DIG FOR GOLD IN THEM THAR HILLS. OTHERS QUIT TO TAKE HIGH-PAYING JOBS ON THE BEACH. NOT STEPHEN LUCE. THE OLD NAVY WAS GATHERING BARNACLES? BUT WAR WAS COMING.

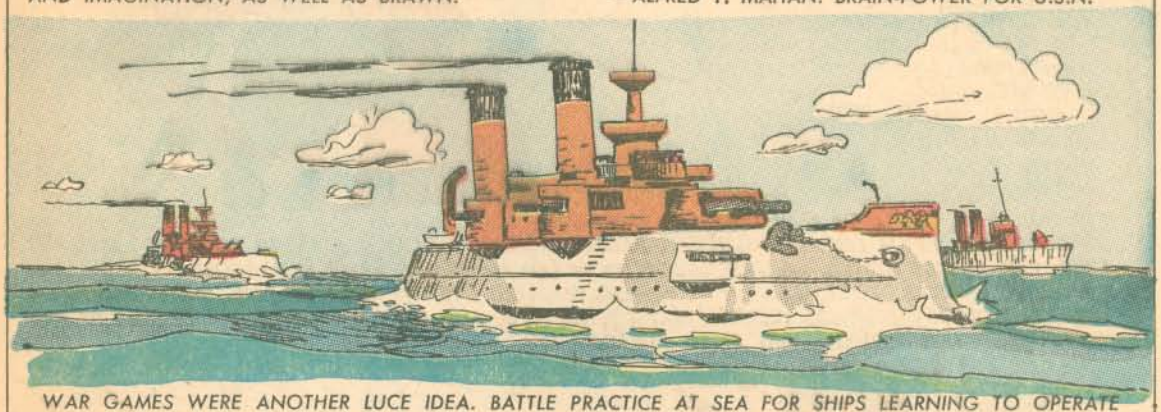


FORWARD-LOOKING AS A TELESCOPE, LUCE SAW THE CIVIL WAR AHEAD. THE OLD WINDJAMMERS WERE GOING OUT. NEW WARSHIPS WERE COMING IN. IN '61 LUCE SERVED ON BLOCKADE DUTY. THEN HE TAUGHT SEAMANSHIP AT NEWPORT. NOT MUCH GLORY, BUT A LOT OF SERVICE TO COUNTRY.

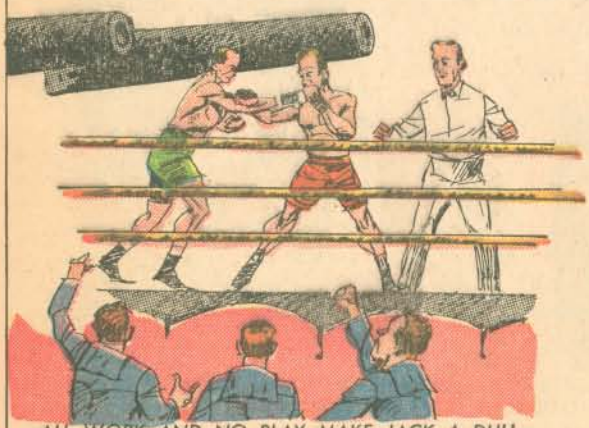
AFTER THE CIVIL WAR LUCE SPECIALIZED IN NAUTICAL SCIENCE. HE BECAME KNOWN AS THE FOREMOST SEAMAN OF THE TIME. BUT HIS GREATEST INTEREST WAS IN TRAINING NAVAL MEN AND OFFICERS FOR THE MODERN NAVY ON THE HORIZON. AT THE ACADEMY HE INSTALLED NEW TEACHING METHODS. HE CALLED FOR BRAINS AND IMAGINATION, AS WELL AS BRAWN.



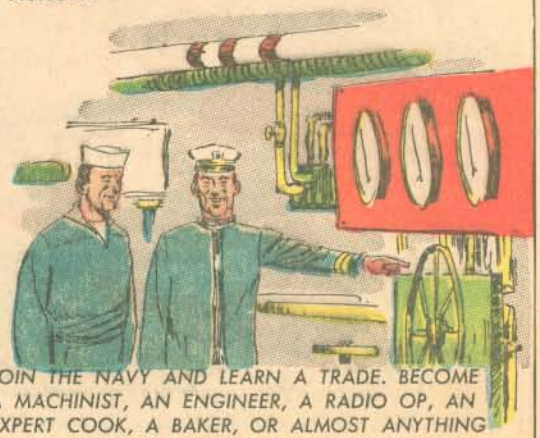
THE NAVAL WAR COLLEGE—THAT WAS LUCE'S IDEA. AN ADVANCED SCHOOL WHERE OFFICERS COULD KEEP ON THINKING. LUCE OPENED THE COLLEGE AT NEWPORT IN 1885. LECTURES ON TACTICS AND STRATEGY, ON SEA POWER, ON LEADERSHIP. A PREPARATORY SCHOOL FOR ADMIRALS. LUCE BROUGHT IN A GREAT LECTURER —ALFRED T. MAHAN. BRAIN-POWER FOR U.S.N.



WAR GAMES WERE ANOTHER LUCE IDEA. BATTLE PRACTICE AT SEA FOR SHIPS LEARNING TO OPERATE IN DIVISIONS AND SQUADRONS. TRAINING FOR THE FLEET. NO BARNACLES, NO STALE THINKING WOULD SLOW THE NAVY FROM HERE ON OUT. A FAST-THINKING NAVY—A FAST-ACTING NAVY—A NAVY READY FOR THE 20TH CENTURY—THIS WAS THE LUCE PROGRAM. BUT A NAVY IS NO BETTER THAN ITS MEN, AND ITS MEN ARE NO BETTER THAN THEIR EDUCATION. UNDER LUCE, NAVY TRAINING WAS MODERNIZED. THE FLEET WAS READIED FOR FAST ACTION.

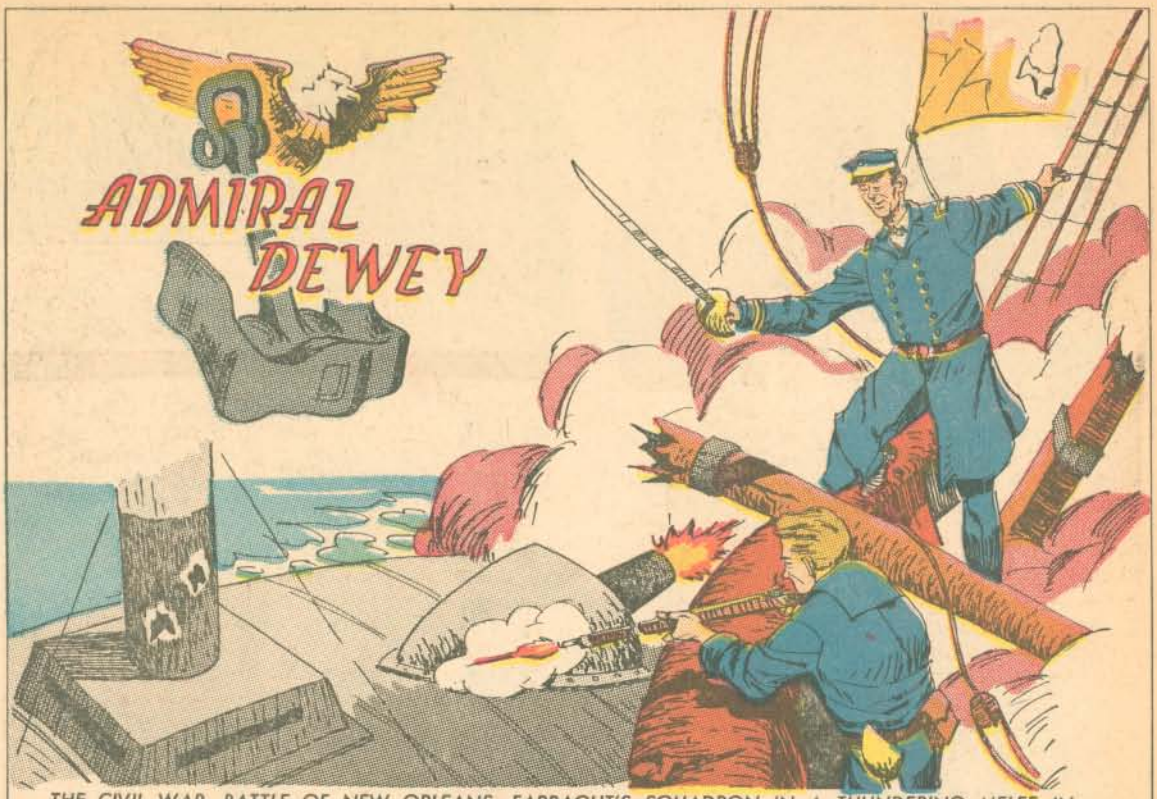


ALL WORK AND NO PLAY MAKE JACK A DULL SAILOR. BASEBALL, BOXING, WRESTLING, MINSTREL SHOWS—THESE WERE LUCE'S PROGRAM, TOO. TIME OUT FOR SOME ENTERTAINMENT. TODAY'S CHEERFUL BLUEJACKET HAS LUCE TO THANK FOR ALL THE FUN.



JOIN THE NAVY AND LEARN A TRADE. BECOME A MACHINIST, AN ENGINEER, A RADIO OP, AN EXPERT COOK, A BAKER, OR ALMOST ANYTHING IN THE BOOK. STRIKE FOR A RATING. GO TO OFFICERS' SCHOOL. YOU CAN DO ALL THESE THINGS TODAY BECAUSE A YOUNGSTER IN THE OLD SAILING NAVY LET NO BARNACLES GROW ON HIS HEAD. LUCE, THE YANKEE WHO EDUCATED THE NAVY.

ADMIRAL DEWEY



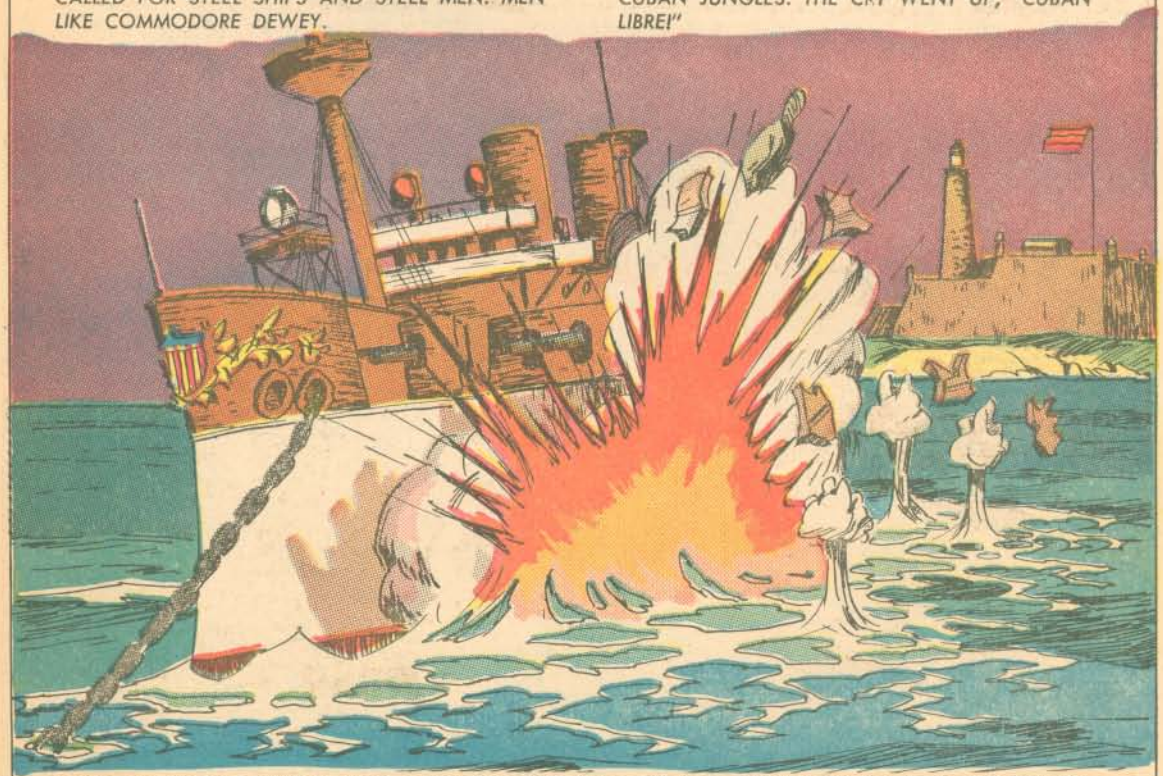
THE CIVIL WAR. BATTLE OF NEW ORLEANS. FARRAGUT'S SQUADRON IN A THUNDERING MELEE IN MID-RIVER. OLD STEAM FRIGATE **MISSISSIPPI** PADDLEWHEELING THROUGH A STORM OF SHOT AND SHELL. OUT RUSHES A REBEL MENACE. MIDGET IRONCLAD **MANASSAS** RAMS THE UNION FRIGATE—SMASH! LT. GEORGE DEWEY, U.S.N., WAS ALMOST KNOCKED OFF THE FRIGATE'S RAIL. BUT HIS SHIP KEPT ON GOING. **MANASSAS** VEERED AWAY TO THE LEVEE AND BLEW UP. DEWEY NEVER FORGOT THE WAY FARRAGUT PUSHED ON. FULL SPEED AHEAD.

AFTER THE VICTORY AT NEW ORLEANS, THE UNION SQUADRON WENT ON UP OLD MAN RIVER. YOUNG GEORGE DEWEY SAW A LOT OF RED HOT ACTION. AT PORT HUDSON THE HEAT WAS TOO MUCH FOR FRIGATE **MISSISSIPPI**. FLOGGED BY REBEL SHORE BATTERIES, SHE RAN AGROUND, CAUGHT FIRE. ORDERS CAME TO ABANDON. LAST MAN OVERSIDE WAS LT. DEWEY—A STICKLER.

AFTER THE CIVIL WAR THE U.S. NAVY WAS "SOLD OUT." HUNDREDS OF WARSHIPS ON THE AUCTION BLOCK! FROM WORLD'S BIGGEST, THE AMERICAN FLEET SHRANK TO ONE SMALLER THAN DENMARK'S. MANY VETERAN SERVICEMEN QUIT. DEWEY STUCK THROUGH HARD TIMES. NOT MUCH PAY EXCEPT IN EXPERIENCE. WHEN THE NEW "WHITE FLEET" WAS BUILT, DEWEY HAD WHAT IT TOOK TO MAKE COMMODORE.

BY 1895 THE "NEW NAVY" CONTAINED FAST NEW MEN-O'WAR—PROTECTED CRUISERS **BOSTON, ATLANTA, CHICAGO, PHILADELPHIA RALEIGH, OLYMPIA** AND OTHERS. DOWN THE WAYS CAME LITTLE BATTLESHIP **MAINE,** NAVY'S FIRST BB. THE OLD DAYS OF WOODEN SHIPS AND IRON MEN WERE GONE FOREVER. THE "NEW NAVY" CALLED FOR STEEL SHIPS AND STEEL MEN. MEN LIKE COMMODORE DEWEY.

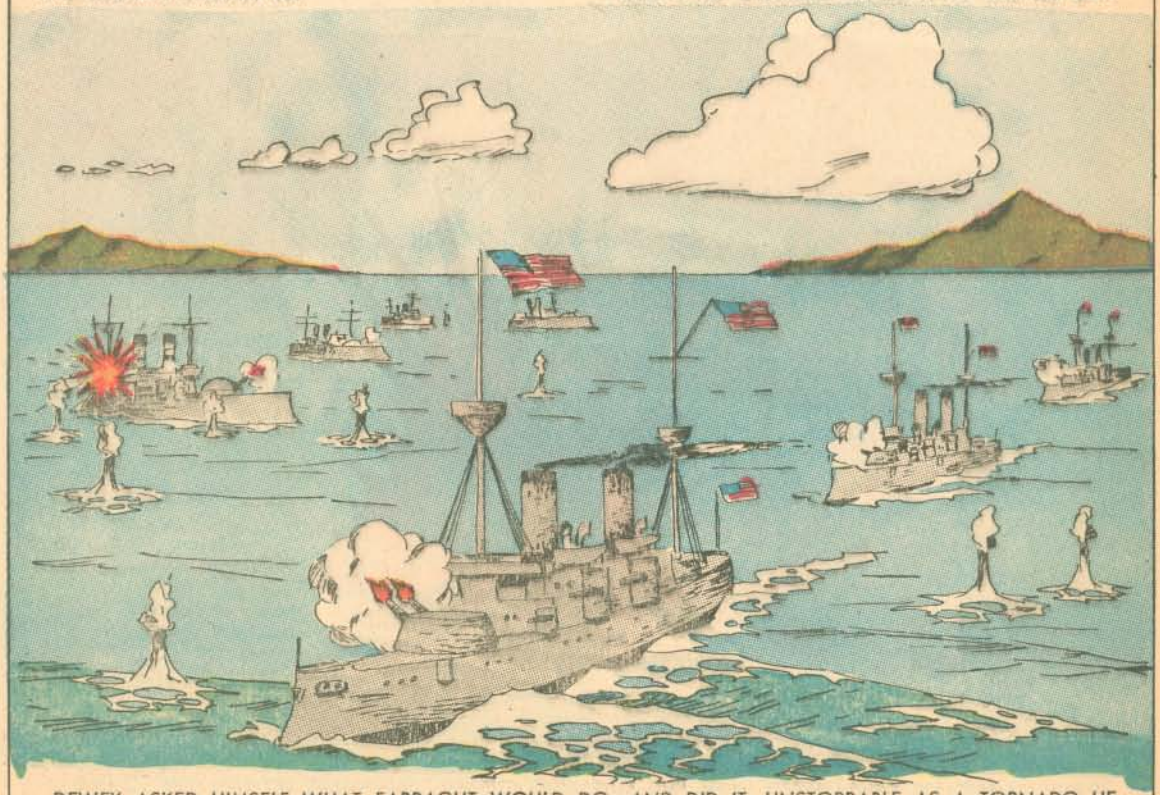
MAINE SAILED JUST IN TIME TO FEATURE IN A GRIM DRAMA. TROUBLE IN CUBA. FOR THREE CENTURIES THE ISLAND AT THE DOOR OF THE CARIBBEAN HAD BEEN UNDER RUTHLESS SPANISH RULE. NATIVE CUBANS APPEALED FOR LIBERATION. SPAIN STAMPED DOWN HARD. REVOLT EXPLODED IN HAVANA. WAR FLARED IN THE CUBAN JUNGLES. THE CRY WENT UP, "CUBAN LIBRE!"



MANY AMERICANS SYMPATHIZED WITH THE SUFFERING CUBANS. FROM 1880 TO 1895 THE ISLAND WAS IN TURMOIL. THEN THE SPANISH MILITARY TURNED IT INTO A SHOOTING GALLERY. EARLY IN 1898 PRESIDENT MCKINLEY ORDERED BATTLESHIP **MAINE** TO HAVANA TO PROTECT AMERICAN INTERESTS. ANCHORED IN HAVANA HARBOR ON THE EVENING OF FEBRUARY 15, THE **MAINE** SUDDENLY BLEW UP WITH A VOLCANIC BLAST. OVER 300 U.S. SAILORS WERE KILLED OR WOUNDED. NOBODY EVER PROVED WHAT CAUSED THE EXPLOSION. BUT SPAIN WAS BLAMED.

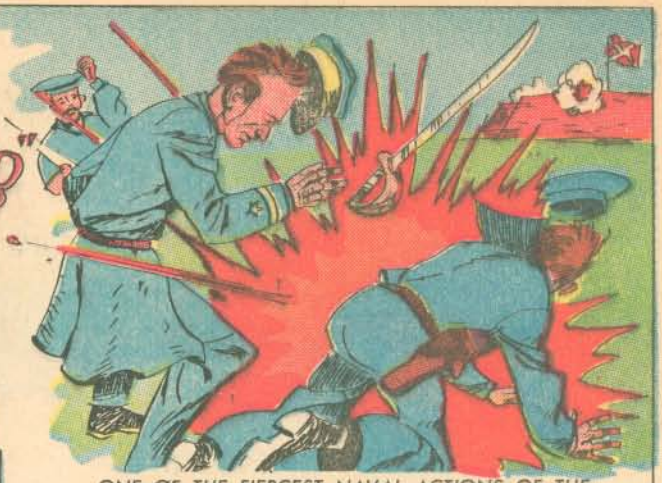
IN WASHINGTON COMMODORE DEWEY HAD BEEN CALLED IN TO SEE ASSISTANT NAVAL SECRETARY TEDDY ROOSEVELT. "T.R." PUT DEWEY IN CHARGE OF THE FAR EAST SQUADRON OUT CHINA WAY. "BE READY," HE TOLD DEWEY,"FOR A MOVE ON THE SPANISH PHILIPPINES."

DEWEY WENT TO HONG KONG. THERE HE RECEIVED WORD FROM ROOSEVELT. "KEEP FULL OF COAL." DEWEY COALED UP. HE ALSO STUDIED UP ON THE PHILIPPINES. THAT APRIL WHEN THE U.S. DECLARED WAR ON SPAIN, DEWEY WAS READY. HE STEAMED STRAIGHT TO MANILA BAY.

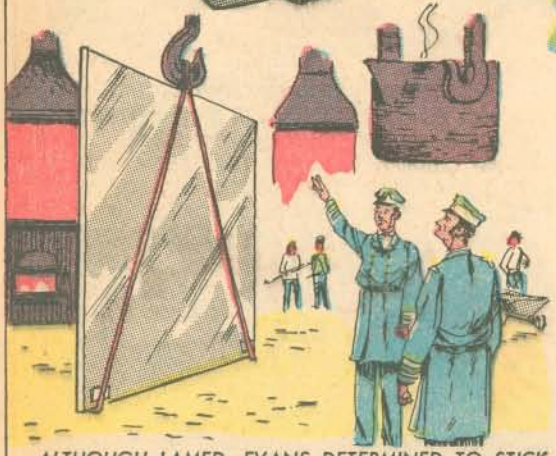


DEWEY ASKED HIMSELF WHAT FARRAGUT WOULD DO—AND DID IT. UNSTOPPABLE AS A TORNADO HE STEAMED INTO MANILA BAY WITH CRUISERS **OLYMPIA, RALEIGH, BOSTON, BALTIMORE** AND GUNBOATS **CONCORD** AND **PETREL.** CAUGHT AT CAVITE BASE WAS A SPANISH GUNBOAT SQUADRON. AGAINST STEEL CRUISERS SPAIN'S OLD GUNBOATS HAD LITTLE CHANCE. IN TWO HOURS THEY WERE SHOT TO SHAMBLES. DEWEY LOST ONE MAN. SPAIN LOST MANILA. DEWEY WROTE: "HARD WORK AND PREPARATION WON."

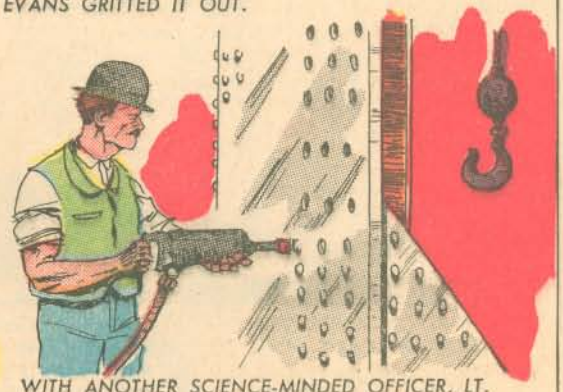
"FIGHTING BOB" EVANS



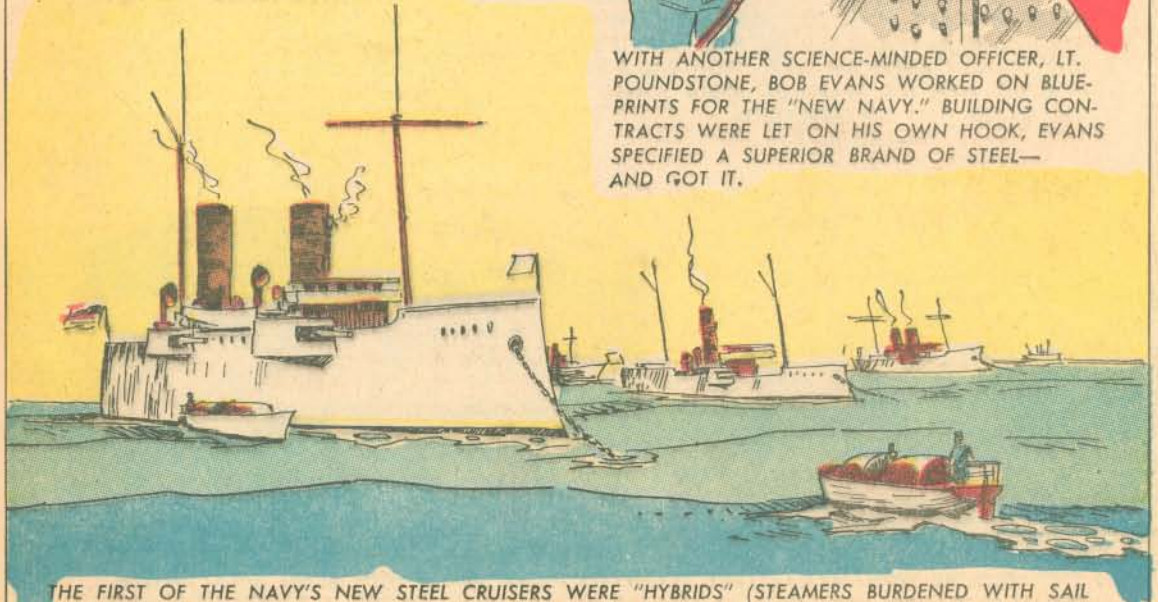
ONE OF THE FIERCEST NAVAL ACTIONS OF THE CIVIL WAR WAS THE ATTACK ON FORT FISHER. STORMING ASHORE, A UNION NAVAL BRIGADE ARMED ONLY WITH REVOLVER AND CUTLASS TOOK A BLASTING FROM REBEL CANNON. AMONG MANY WHO WERE FELLED WAS ENSIGN ROBLEY D. EVANS. FOUR BULLET WOUNDS. LEGS SMASHED. BUT EVANS GRITTED IT OUT.



ALTHOUGH LAMED, EVANS DETERMINED TO STICK WITH NAVY. AS A LIEUTENANT HE STUDIED SCIENTIFIC SUBJECTS—SHIP DESIGN, ENGINEERING. THEN HE CONCENTRATED ON METALLURGY. HE BECAME AN EXPERT ON METALS AND ARMOR PLATE FOR SHIP CONSTRUCTION.

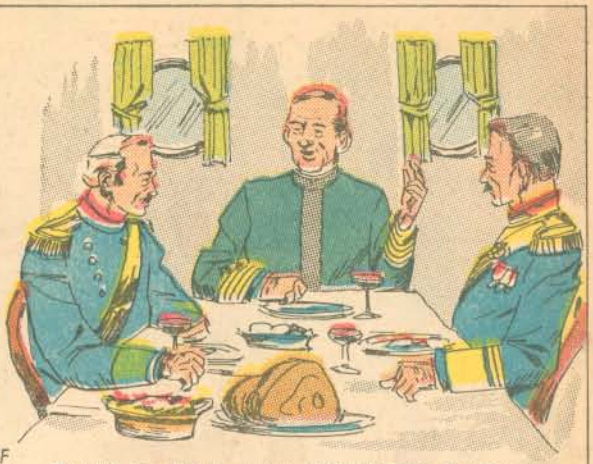


WITH ANOTHER SCIENCE-MINDED OFFICER, LT. POUNDSTONE, BOB EVANS WORKED ON BLUE-PRINTS FOR THE "NEW NAVY." BUILDING CONTRACTS WERE LET ON HIS OWN HOOK, EVANS SPECIFIED A SUPERIOR BRAND OF STEEL—AND GOT IT.

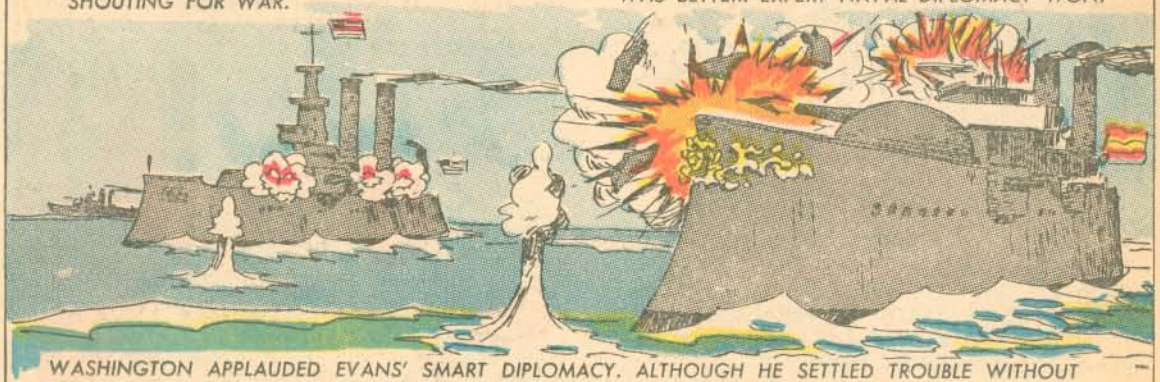


THE FIRST OF THE NAVY'S NEW STEEL CRUISERS WERE "HYBRIDS" (STEAMERS BURDENED WITH SAIL TO SAVE COAL). EVANS DEMANDED BETTER CONSTRUCTION AND GOT IT. DOWN CAME SPARS AND RIGGING. UP WENT MILITARY MASTS AND TALL STACKS FOR A LOT OF DRAUGHT. THANKS TO EVANS AND POUNDSTONE—OFFICERS WHO KNEW THEIR SCIENCE—THE NAVY'S NEW "WHITE SQUADRON" LED THE FIELD. ARMORED WARSHIPS BUILT OF PROCESSED AMERICAN STEEL—THE BEST.

GIVEN SHIP COMMAND, EVANS WAS SKIPPER OF GUNBOAT **YORKTOWN** WHEN WAR WITH CHILE THREATENED. THERE'D BEEN TROUBLE IN VALPARAISO. MEN FROM CRUISER **BALTIMORE** IN A FIGHT. HEADS BROKEN IN A WATERFRONT SALOON. THREE VICTIMS KILLED. CHILEANS SHOUTING FOR WAR.



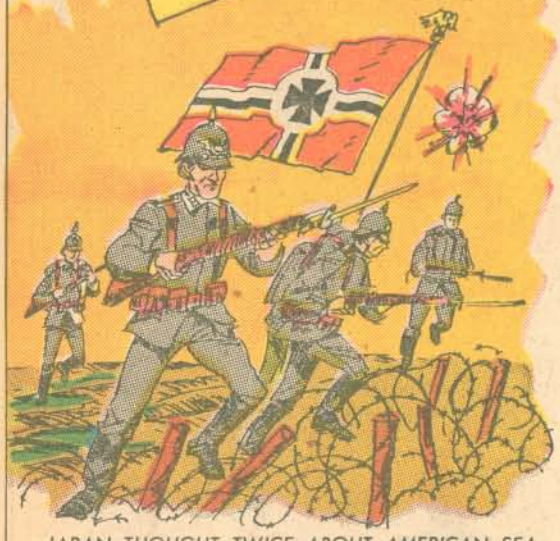
EVANS SAILED IN WITH **YORKTOWN.** CHILEAN TORPEDO BOATS "BUZZED" HIS SHIP, INVITING THE LOCAL NAVAL COMMAND ON BOARD, EVANS POURED CHAMPAGNE, THEN TOLD THEM HE'D GIVE THEM WAR IF THEY WANTED IT, BUT PEACE WAS BETTER. EXPERT NAVAL DIPLOMACY WON.



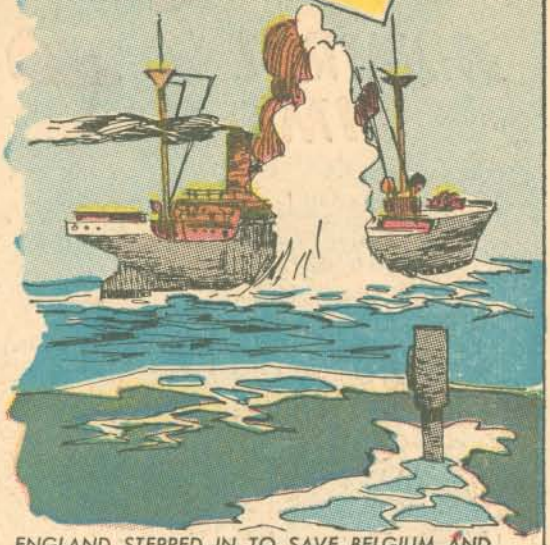
WASHINGTON APPLAUDED EVANS' SMART DIPLOMACY. ALTHOUGH HE SETTLED TROUBLE WITHOUT GUNNERY, HE CAME HOME TO CHEERS AS "FIGHTING BOB." SOON PROMOTED TO CAPTAINCY OF BATTLESHIP **IOWA,** EVANS SET THE PACE AND STYLE FOR THE MODERN AMERICAN NAVAL LEADER. IN THE SPANISH AMERICAN WAR, "FIGHTING BOB" HAD **IOWA** IN THERE IN THE BATTLE OF SANTIAGO. WITH OTHER NEW U.S. WARSHIPS, **IOWA** JOINED IN SINKING SPAIN'S ATLANTIC SQUADRON IN THE NAVAL SMASH THAT LIBERATED CUBA.

IN 1907—TROUBLE WITH JAPAN. TEDDY ROOSEVELT SPOKE SOFTLY WITH A BIG STICK. SIXTEEN AMERICAN BATTLESHIPS WERE SENT TO ASIA ON WORLD CRUISE. OBJECT: A "GOOD WILL" VISIT TO TOKYO. LEADER OF THE CRUISE WAS ADMIRAL "FIGHTING BOB" EVANS. CROSSING THE PACIFIC, THE U.S. FLEET MADE WORLD HEADLINES. AND JAPAN'S RESTLESS WAR LORDS THOUGHT BETTER OF STARTING TROUBLE. THE CRUISE WAS A TRIUMPH FOR THE U.S.A. AND FOR EVANS—QUIET SEA FIGHTER WHO LED THE NAVY INTO THE 20TH CENTURY.

WORLD WAR 1



JAPAN THOUGHT TWICE ABOUT AMERICAN SEA POWER. BUT NOT GERMANY. IN AUGUST 1914 THE PRUSSIAN WAR LORDS SET OUT TO CONQUER EUROPE. INVADING FRANCE AND BELGIUM, THE KAISER'S WAR MACHINE SEEMED UNSTOPPABLE. THE OCEAN REMAINED A PROBLEM.



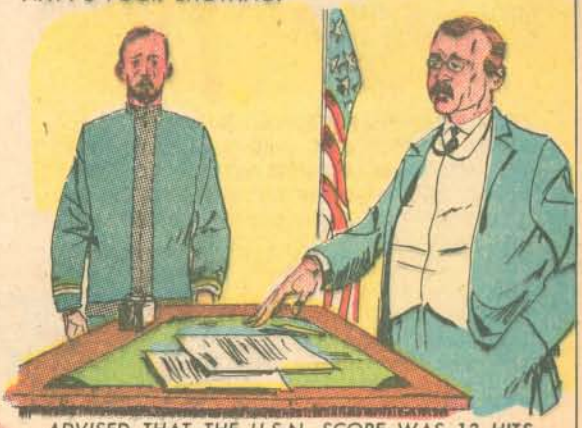
ENGLAND STEPPED IN TO SAVE BELGIUM AND FRANCE. GERMAN U-BOATS BORED IN TO STOP THE ROYAL NAVY. BY 1916 THE BRITISH WERE FIGHTING BACK TO WALL. DEADLY GERMAN SUBMARINES WERE TORPEDOING ENGLAND'S NAVAL EFFORT.

AMERICA TRIED TO REMAIN NEUTRAL. BUT BY 1915 THE U-BOATS WERE RAMPAGING IN THE ATLANTIC. PRESIDENT WILSON PROTESTED. AMERICAN SHIPPING MUST GO THROUGH. THE KAISER'S WAR LORDS ANSWERED HARSHLY—ENGLAND WAS IN A WAR ZONE, ALL SHIPS WOULD SAIL IN THIS ZONE AT THEIR PERIL. IN MAY 1915 THE GREAT CUNARD LINER **LUSITANIA** WAS TORPEDOED OFF IRELAND. NEARLY 1,200 MEN, WOMEN AND CHILDREN WERE DROWNED. AMERICANS WERE HORRIFIED. THE GERMANS HAD TO BE STOPPED.

ADMIRAL SIMS

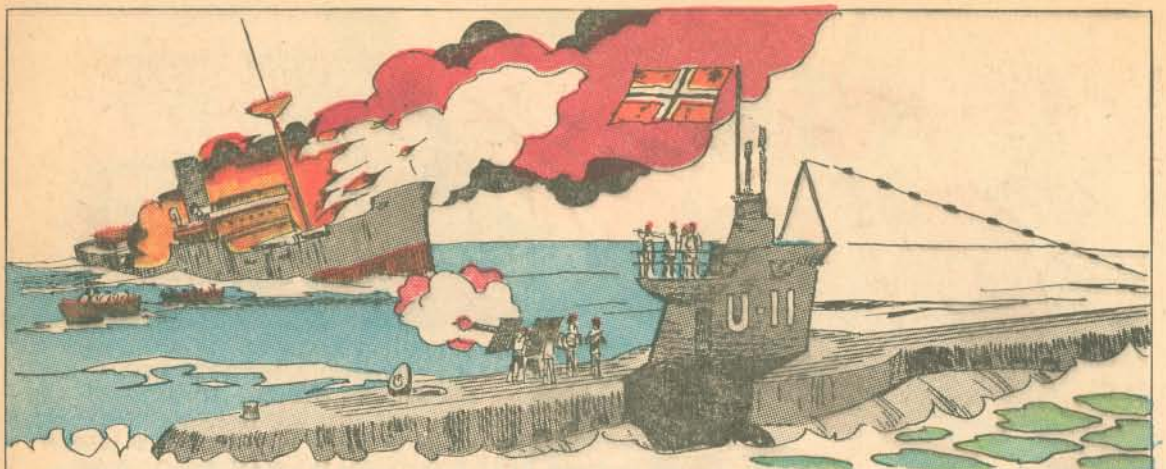
OUT ON CHINA STATION IN 1901 WAS A YOUNG LIEUTENANT NAMED WILLIAM S. SIMS. AT PARIS AND ST. PETERSBURG, WHERE HE'D BEEN A NAVAL ATTACHE, SIMS HAD TAKEN AN INTEREST IN GUNNERY. NOW HE WAS STARTLED BY THE NAVY'S POOR SHOWING.

AT BATTERY PRACTICE THE U.S. FLEET WAS FAR BEHIND BRITAIN'S. WHY? SIMS HAD IDEAS ON THE SUBJECT, BUT NOBODY HEEDED A LIEUTENANT'S IDEAS. SO IN 1901 SIMS WROTE A LETTER TO PRESIDENT ROOSEVELT. DIDN'T THAT RAISE A STORM!



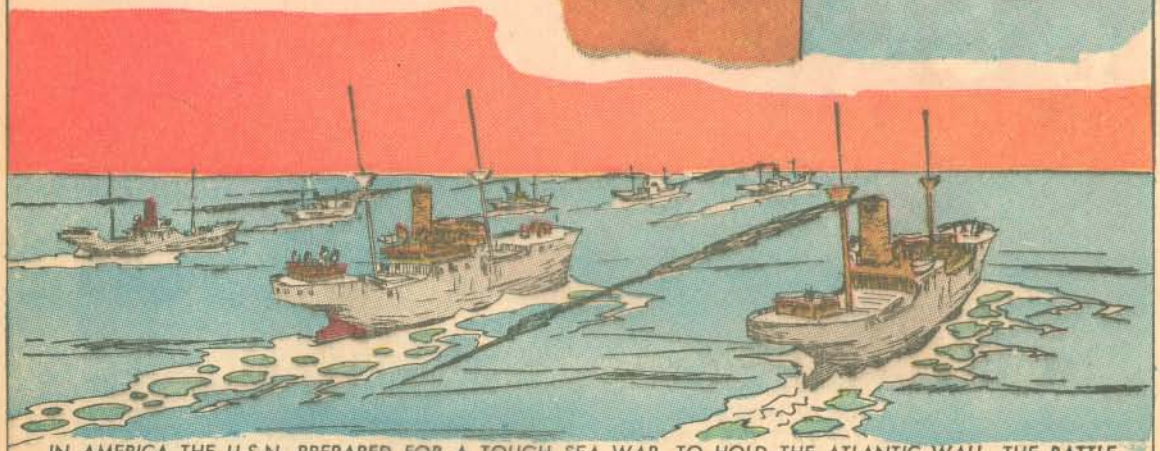
ADVISED THAT THE U.S.N. SCORE WAS 13 HITS OUT OF 100, WHILE THE BRITISH SCORED 85, "T.R." TOOK THE BULL BY THE HORNS. "CABLE TO CHINA AND HAVE THAT YOUNG MAN COME HOME! GIVE HIM ENTIRE CHARGE OF TARGET PRACTICE FOR 18 MONTHS. IF HE DOESN'T ACCOMPLISH SOMETHING IN THAT TIME, CUT OFF HIS HEAD!"

WAS SIMS BEHEADED? NOT QUITE. FOR OVER SIX YEARS HE SERVED AS INSPECTOR OF TARGET PRACTICE. AND THE SCORE IN U.S. NAVAL GUNNERY SOARED FROM 13 TO BETTER THAN 90. AFTER WHIPPING THE NAVY'S SALVOS INTO SHAPE, SIMS LAUNCHED A CAMPAIGN FOR DREADNAUGHT CONSTRUCTION. BIG BATTLEWAGONS WITH "BASKET" MASTS.



BY 1917 THE SITUATION FOR THE ALLIES WAS CRITICAL—FRANCE ALMOST CRUSHED—ITALY BEATEN BY AUSTRIA-HUNGARY—ENGLAND TOTTERING. EUROPE WAS A GRAVEYARD DUG BY GERMAN CANNON. AT SEA THE U-BOATS WERE SINKING NEARLY 100 SHIPS A MONTH. WITH WAR COMING PRESIDENT WILSON SENT ADMIRAL SIMS TO LONDON. FIRST SEA LORD ADMIRAL JELLICO GAVE HIM SOME ALARMING NEWS. THE U-BOATS WERE BLOODY MURDER. "THEY WILL WIN UNLESS WE CAN STOP THEM SOON." BUT HOW COULD THEY BE STOPPED?

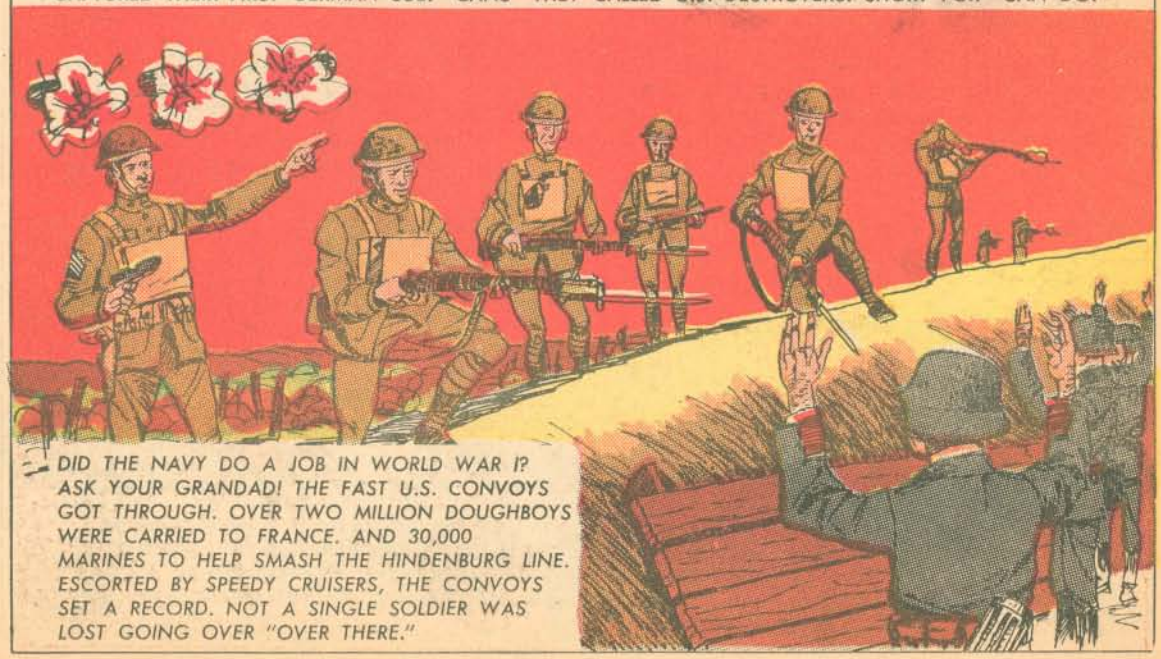
ROYAL NAVY EXPERTS TOLD SIMS THE CASE WAS HOPELESS. U-BOAT DEFENSES WEREN'T WORKING. MERCHANT SHIPS HADN'T A CHANCE IN THE WAR ZONE. SIMS SUGGESTED BIG CONVOYS ESCORTED BY WARSHIPS. THE BRITISH SAID IT COULDN'T BE DONE. BUT SIMS SAW CONVOYS AS THE ANSWER. BIG SHIP TRAINS UNDER ESCORT. WITH WAR DECLARED THAT APRIL, HE FLASHED THE WORD TO THE STATES. BUT FIRST A U.S. DESTROYER SQUADRON WAS RUSHED TO ENGLAND. A MORALE BOOST. THEY CALLED IT, "RETURN OF **THE** MAYFLOWER."



IN AMERICA THE U.S.N. PREPARED FOR A TOUGH SEA WAR. TO HOLD THE ATLANTIC WALL, THE BATTLESHIP FLEET ASSEMBLED AT HAMPTON ROADS. SQUADRONS OF SCRAPPY LITTLE DESTROYERS—"FOUR PIPERS"—SET OUT FOR EUROPE'S WATERS TO FIGHT THE U-BOATS WITH DEPTHCHARGES (CALLED ASH-CANS). BUT THE BIG TRY WAS CONVOYING—A HERD OF MERCHANT SHIPS ESCORTED BY A CRUISER SQUADRON UNDER ADMIRAL GLEAVES. THE FIRST AMERICAN CONVOY REACHED FRANCE ON JULY 4, 1917. NO HITS, NO SUBS, NO ERRORS.

U.S. DESTROYERS BASED AT QUEENSTOWN, IRELAND, LAUNCHED A NONSTOP U-BOAT HUNT. THE SEA AROUND ENGLAND ROARED WITH ASHCANS. BUT SUBS ARE HARD TO TRAP, HARD TO HIT. IN OCTOBER 1917, DESTROYER **CASSIN** WAS TORPEDOED. THE BLAST EXPLODED HER DEPTHCHARGES. SHE FOUGHT BACK WITH HER DECK GUN, AND JUST MADE IT INTO PORT.

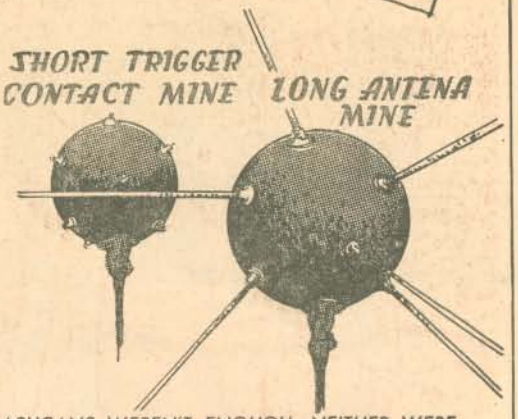
THE YANKS AT QUEENSTOWN WENT ALL OUT TO EVEN THE SCORE WITH "FRITZ." SOON AFTER THE **CASSIN** BLASTING THEY HAD THEIR CHANCE. ESCORTING A CONVOY OUT OF QUEENSTOWN, DESTROYER **FANNING** SIGHTED A PERISCOPE AHEAD. **FANNING** RUSHED THE ENEMY. SO DID DESTROYER **NICHOLSON.** TWO DEPTHCHARGES WHAMMED! UP CAME THE U-58. "KAMERAD! KAMERAD!" THE AMERICANS HAD CAPTURED THEIR FIRST GERMAN SUB. "CANS" THEY CALLED U.S. DESTROYERS. SHORT FOR "CAN DO."



DID THE NAVY DO A JOB IN WORLD WAR I? ASK YOUR GRANDAD! THE FAST U.S. CONVOYS GOT THROUGH. OVER TWO MILLION DOUGHBOYS WERE CARRIED TO FRANCE. AND 30,000 MARINES TO HELP SMASH THE HINDENBURG LINE. ESCORTED BY SPEEDY CRUISERS, THE CONVOYS SET A RECORD. NOT A SINGLE SOLDIER WAS LOST GOING OVER "OVER THERE."

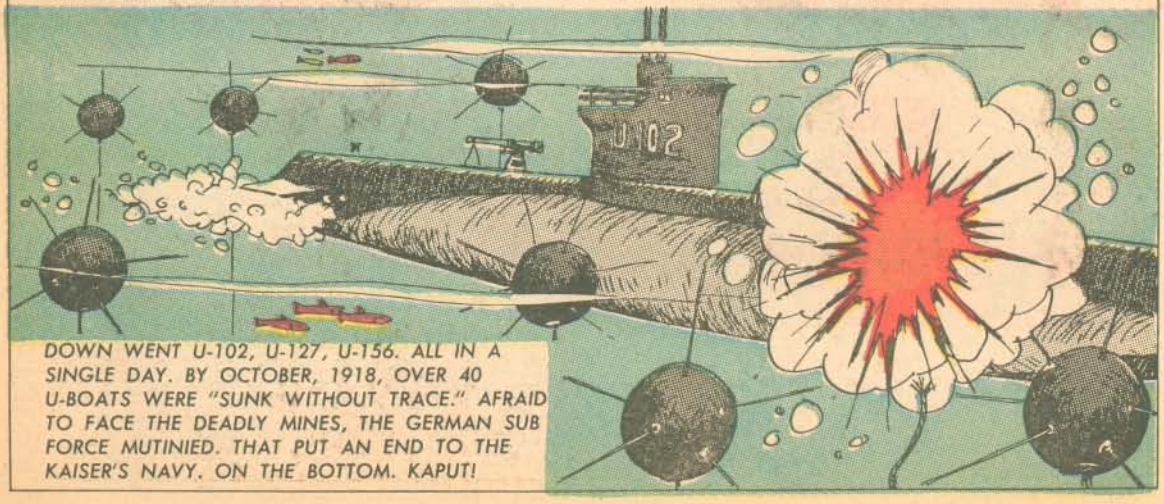
BELKNAP'S "MINERS"

BUT THE U-BOATS WEREN'T EASILY DOWNED. ON THE WESTBOUND RUN AMERICAN SHIPS WERE HARD HIT. A HEAVY LOSS WAS TRANSPORT **LINCOLN**, SUNK ON THE WAY HOME FROM FRANCE. IN 1918 THE U-BOATS RAIDED AMERICAN WATERS. NEAR NEW YORK, CRUISER **SAN DIEGO** WAS SUNK BY A U-BOAT MINE. OFF DELAWARE A BATTLESHIP WAS BLASTED.

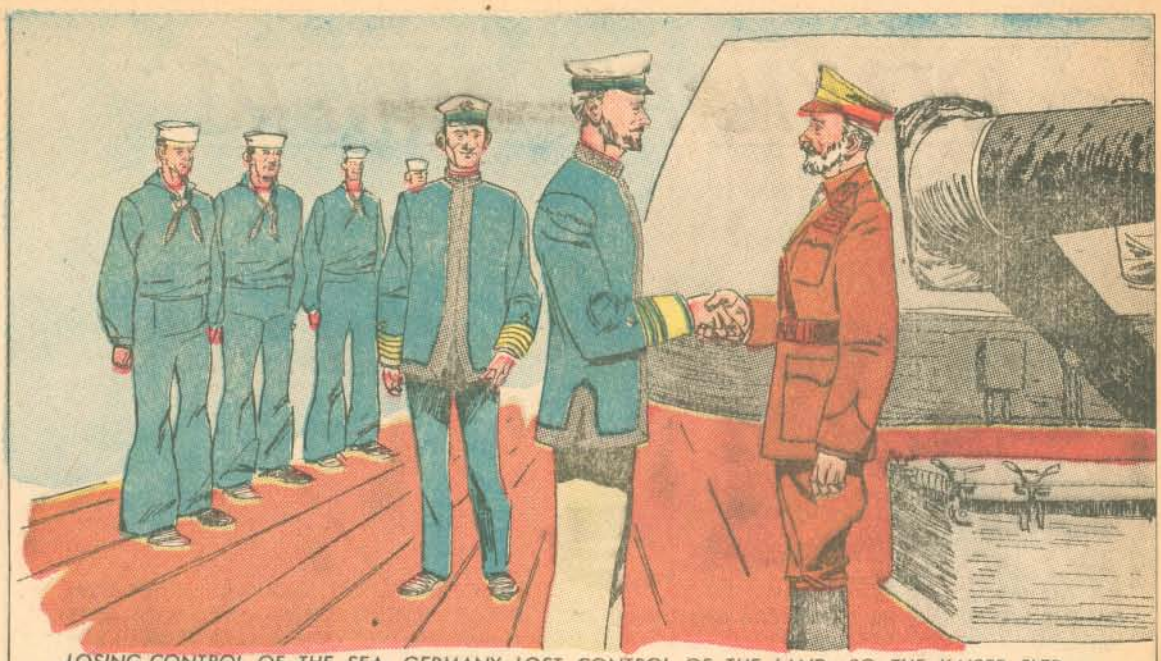


ASHCANS WEREN'T ENOUGH. NEITHER WERE DECOY SHIPS (Q-BOATS) ARMED WITH HEAVY GUNS. BUT WHY NOT A MINE FIELD ACROSS THE NORTH SEA? A VAST UNDERSEA BARRIER OF MINES! THE BRITISH SAID, "IMPOSSIBLE." ADMIRAL RALPH EARLE, U.S.N., SAID OTHERWISE. INSTEAD OF SHORT-TRIGGER **CONTACT** MINES, THE U.S.N. WOULD USE MINES WITH LONG ANTENNA.

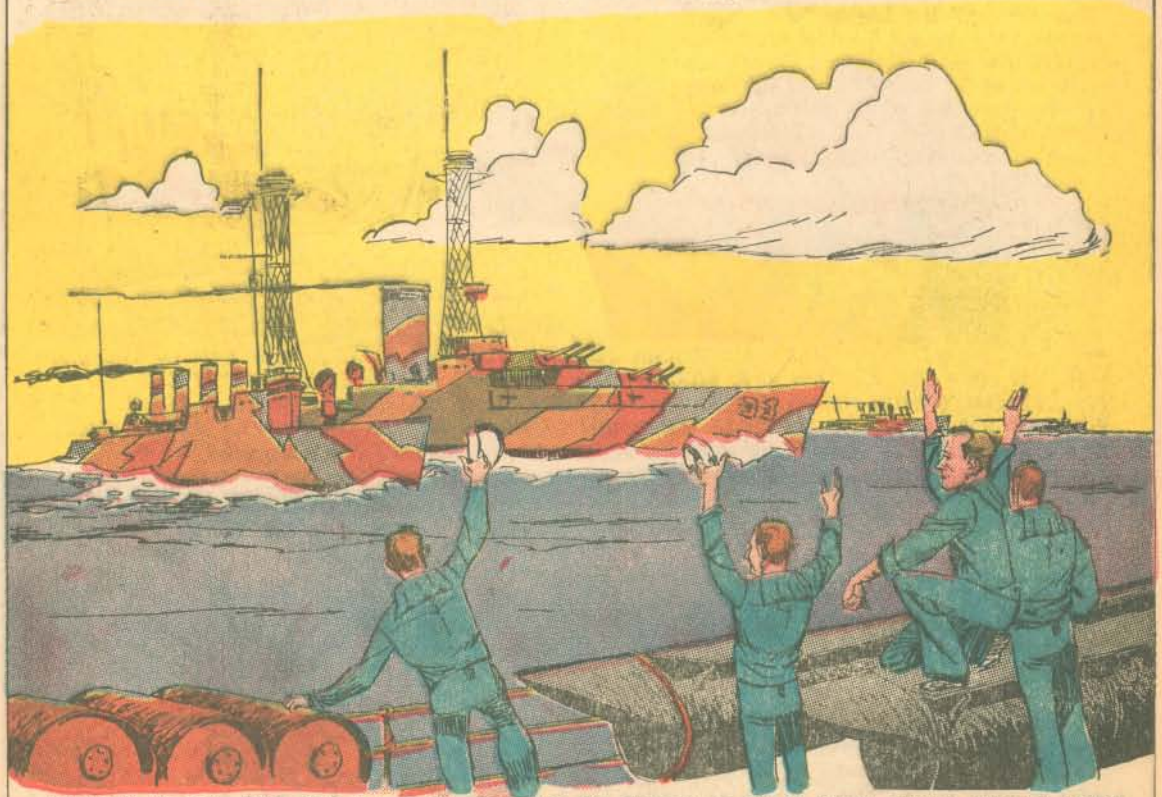
AMERICAN INGENUITY DID IT. PLUS AMERICAN INDUSTRY. PLUS THE OFFICERS AND MEN OF THE U.S. NAVY. IN MAY 1918, CAPTAIN R. R. BELKNAP WITH A TRAINED MINING SQUADRON SFT OUT FOR EUROPE. LOADED WITH NEW-TYPE ANTENNA MINES, BELKNAP'S SQUADRON STARTED A NORTH SEA PLANTING JOB CALCULATED TO CLOSE THE MOUTH OF THE BALTIC. DID THE "MINERS" DO IT? OVER 68,000 MINES IN LESS THAN FOUR MONTHS! POISON TO THE KAISER'S U-BOATS.



DOWN WENT U-102, U-127, U-156. ALL IN A SINGLE DAY. BY OCTOBER, 1918, OVER 40 U-BOATS WERE "SUNK WITHOUT TRACE." AFRAID TO FACE THE DEADLY MINES, THE GERMAN SUB FORCE MUTINIED. THAT PUT AN END TO THE KAISER'S NAVY. ON THE BOTTOM. KAPUT!

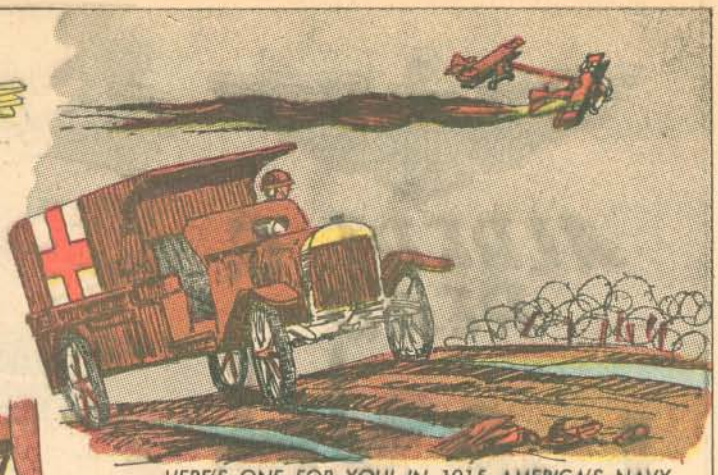


LOSING CONTROL OF THE SEA, GERMANY LOST CONTROL OF THE LAND. SO THE KAISER FLED. PRUSSIA'S WAR LORDS SURRENDERED. IN NOVEMBER, 1918, CAME THE ARMISTICE. BRITAIN'S KING GEORGE THANKED ADMIRAL SIMS AND THE U.S. NAVY FOR A JOB WELL DONE. CONVOYS, "CANS," AND MINES HAD TURNED THE GERMAN U-BOATS INTO X-BOATS.



VICTORY AT SEA, 1918—THE U.S. FLEET STEAMING ON REVIEW AT SCAPA FLOW. HEAVY WEIGHT BATTLE-WAGONS READY TO DELIVER THE KNOCKOUT PUNCH IF NEEDED. BUT THE KNOCKOUT HAD ALREADY BEEN DELIVERED BY CONVOY ESCORTS, FAST DESTROYERS AND MINELAYERS—LITTLE SHIPS THAT DID THE BIG AMERICAN JOB AT SEA IN WORLD WAR I.

TRUBEE DAVISON



HERE'S ONE FOR YOU! IN 1915 AMERICA'S NAVY HAD FEWER PILOTS AND AIRCRAFT THAN ITALY'S. NAVAL AVIATION? CONGRESS WASN'T INTERESTED. BUT A CERTAIN YALE STUDENT WAS. THAT SUMMER HE'D GONE OVERSEAS TO WORK WITH THE AMERICAN AMBULANCE SERVICE. AT THE FRONT HE SAW THE FAMOUS LAFAYETTE ESCADRILLE. TRUBEE DAVISON CAME HOME WITH HIS HEAD IN THE CLOUDS.

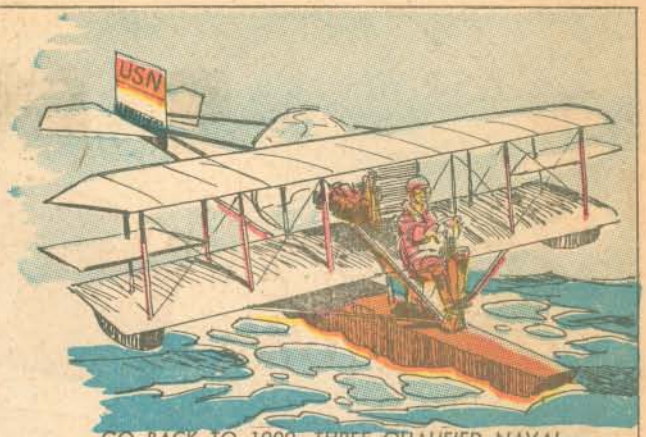
BACK AT YALE, TRUBEE TALKED IT UP. HOW ABOUT AN AVIATION UNIT READY TO FIGHT? CLASSMATES PROMPTLY VOLUNTEERED. BUT WHEN THEY TRIED TO JOIN THE NAVAL RESERVE FLYING CORPS—COLD WATER! TOLD NO PLANES WERE AVAILABLE FOR COLLEGE KIDS, TRUBEE WENT TO WASHINGTON.

THE GOVERNMENT REMAINED DEAF TO AN APPEAL FOR TRAINING. SO TRUBEE AND HIS FRIENDS TRAINED ON THEIR OWN. IN MARCH 1917 YOUNG DAVISON TRIED AGAIN. NAVY ACE, JACK TOWERS, GAVE A HAND. ASSISTANT NAVAL SECRETARY F. D. ROOSEVELT AGREED TO HELP THE BOYS.

SO DAVISON'S SELF-MADE UNIT JOINED THE NAVY JUST BEFORE AMERICA WENT TO WAR. THEN, TRAINING AT MIAMI, DAVISON WAS IN A SEAPLANE CRASH. BADLY INJURED, HE WOULD NEVER FLY A WARPLANE. BUT HIS DREAM TOOK WING. THE YALE UNIT MADE AVIATION HISTORY.

YALE BOYS IN SEAPLANES PATROLLED THE FRENCH COAST AND SHOT AT U-BOATS. IN FLAMING SKIES THEY FOUGHT GERMAN PLANES. DAVE INGALLS AND ART GATES WOULD ONE DAY BECOME ASSISTANT SECRETARIES FOR NAVY AIR. ACES OF TRUBEE DAVISON, MINUTE MAN OF NAVAL AVIATION.

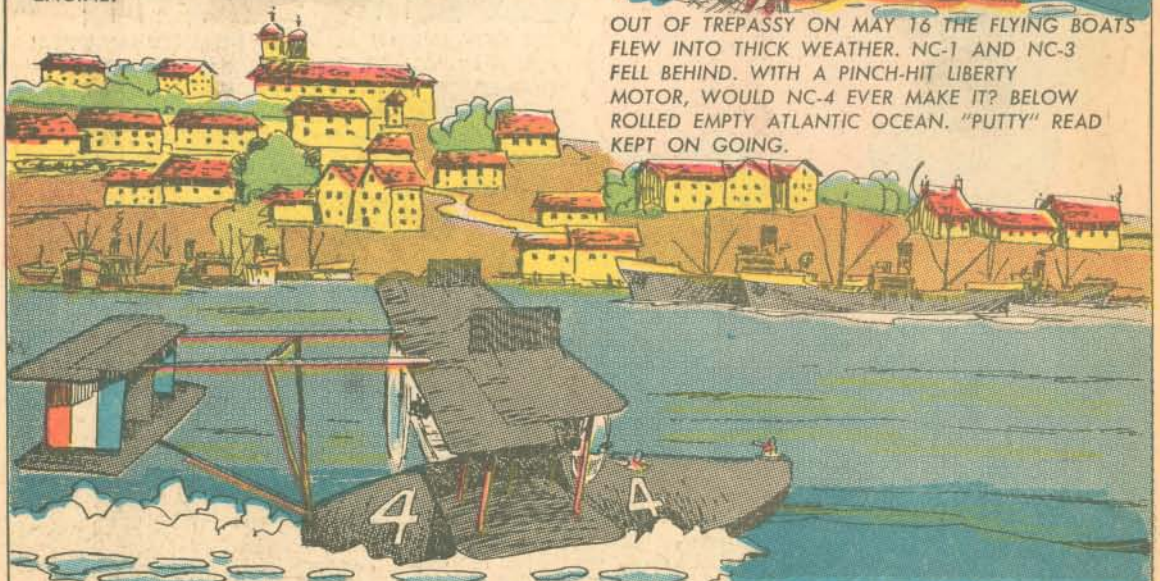
ALBERT C. READ



GO BACK TO 1909. THREE QUALIFIED NAVAL AVIATORS: "SPUDS" ELLYSON, JOHN RODGERS AND JACK TOWERS. FLYING MACHINES THAT LOOKED LIKE BOX KITES ON CANOES. THEN 1914. PAT BELLINGER AT VERA CRUZ—NAVY'S FIRST WAR PATROL. NOW IN 1919? SCORES OF VETERAN NAVAL PILOTS. BIG FOUR-ENGINE SEAPLANES OF THE NC TYPE. ACES LIKE A. C. READ DETERMINED TO FLY THE ATLANTIC.

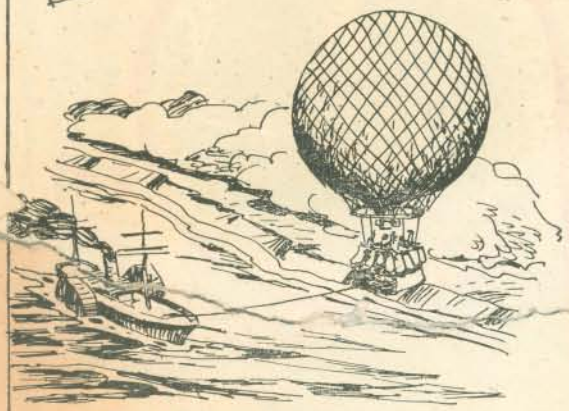
SOME SAID IT COULDN'T BE DONE. WERE THEY RIGHT? INTENDING TO JUMP FROM HALIFAX TO THE AZORES, THREE NAVY NC'S TOOK OFF FROM ROCKAWAY. READ COMMANDED THE NC-4. TROUBLE FORCED HER DOWN AT CHATHAM. READ AND CREW WORKED ALL NIGHT TO CHANGE AN ENGINE.

OUT OF TREPASSY ON MAY 16 THE FLYING BOATS FLEW INTO THICK WEATHER. NC-1 AND NC-3 FELL BEHIND. WITH A PINCH-HIT LIBERTY MOTOR, WOULD NC-4 EVER MAKE IT? BELOW ROLLED EMPTY ATLANTIC OCEAN. "PUTTY" READ KEPT ON GOING.

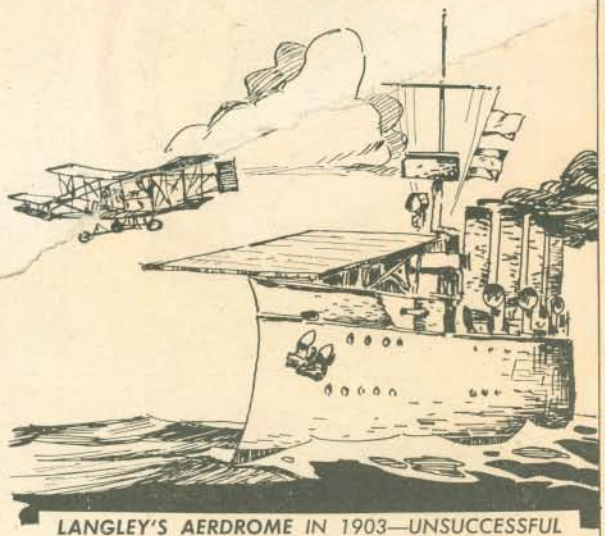


READ COAXED THE ENGINES. ALL HANDS COAXED. MAYBE THEY PRAYED, TOO, AN EYE ON THE GAS. HOUR AFTER HOUR THE BIG PLANE (GIANT FOR THOSE DAYS) DRONED ON. NO RADAR BEAM NO FANCY INSTRUMENT PANEL LIKE TODAY'S. YOU FLEW MOSTLY BY THE SEAT OF YOUR PANTS. "THE AZORES!" THE NC-4 GOT THERE. THEN ON TO LISBON AND LONDON IN HIGH TRIUMPH. ACROSS THE OCEAN AHEAD OF ALCOCK AND BROWN. EIGHT YEARS AHEAD OF LINDBERGH. "PUTTY" READ AND CREW, U.S.N. BLAZERS OF THE ATLANTIC.

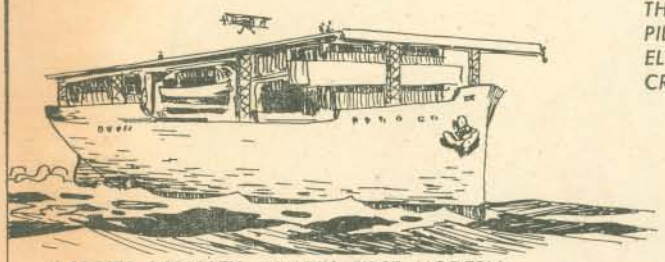
HERE COME THE CARRIERS



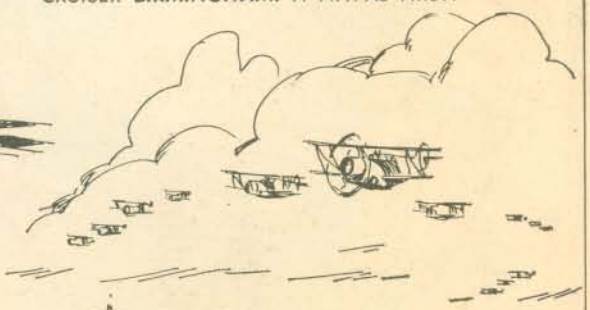
BELIEVE IT OR NOT, THE FIRST AMERICAN FLATTOP—**U.S. GEORGE WASHINGTON PARKE CUSTIS** IN THE CIVIL WAR! STATIONED IN THE LOWER POTOMAC, SHE RAISED A BALLOON TO DETECT CONFEDERATE BLOCKADE RUNNERS. PIONEER NAVY EFFORT AT AERIAL WARFARE!

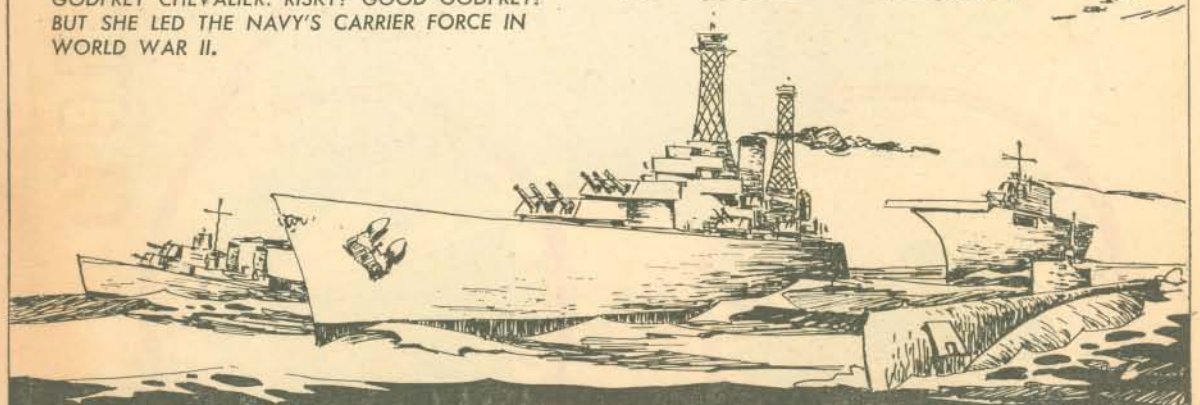


LANGLEY'S AERDROME IN 1903—UNSUCCESSFUL EFFORT TO LAUNCH A FLYING MACHINE FROM THE DECK OF A HOUSEBOAT. IN 1910 CIVILIAN PILOT EUGENE ELY HAD BETTER LUCK. DAREDEVIL ELY FLEW A PLANE FROM A PLATFORM ON CRUISER **BIRMINGHAM.** A NAVAL FIRST.

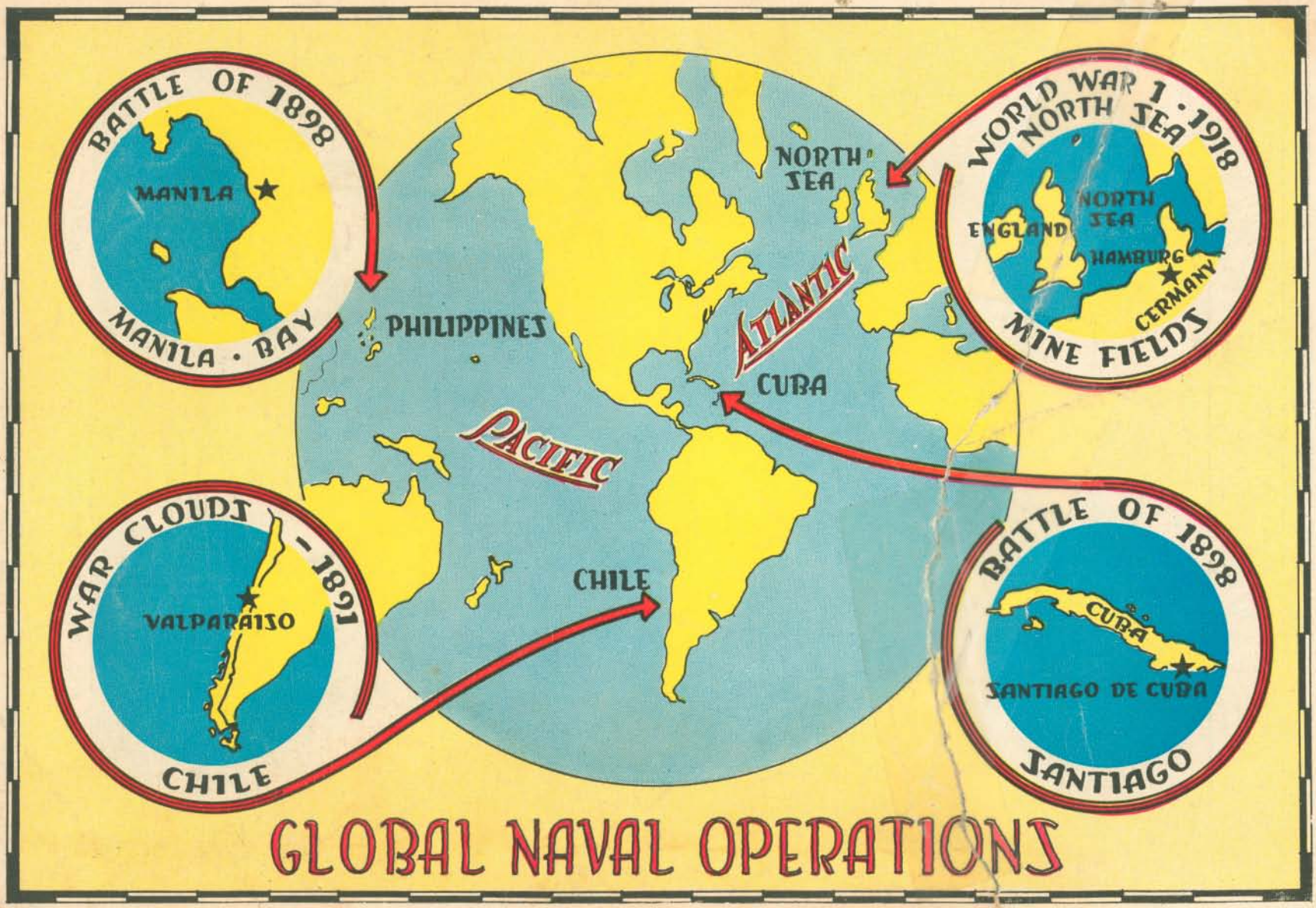


CARRIER LANGLEY—NAVY'S FIRST MODERN AIRCRAFT CARRIER. A CONVERTED COAL COLLIER, SHE PUT TO SEA IN OCTOBER 1922. FIRST DECK LANDING WAS MADE BY NAVY PILOT GODFREY CHEVALIER. RISKY? GOOD GODFREY! BUT SHE LED THE NAVY'S CARRIER FORCE IN WORLD WAR II.





U. S. FLEET STEAMING INTO 1930. BATTLEWAGONS, CRUISERS, DESTROYERS, SUBMARINES. CARRIERS OVER THE HORIZON, AND A SKY PARADE OF NAVAL AIRCRAFT. ON THE SEA, UNDER THE SEA, AND OVER THE SEA, THE U.S.N. SAILS ON. SEA POWER FOR THE U.S.A. IN THE SCIENTIFIC 20TH CENTURY.



GLOBAL NAVAL OPERATIONS